

above amendments and following remarks is respectfully requested. The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

I. CLAIM FOR PRIORITY

A claim for priority was filed on January 7, 2003, with a certified copy of the priority document for this application. It is respectfully requested that that Examiner acknowledge receipt of the certified copy.

II. THE FOLLOWING CLAIMS 42-44 SATISFY THE REQUIREMENTS OF 35 U.S.C. §112, FIRST PARAGRAPH

The Office Action states that the written disclosure does not seem to disclose "the transaction system that transacts a reaction force." Applicant respectfully disagrees. See the specification at, e.g., page 8, lines 20 to page 9, line 9. In particular, at page 8, lines 20-23, the specification discloses that stationary parts 13A and 13B (or part of a transaction system) generate (or transact) a reaction force in response to a driving force applied to movable parts 14A and 14B (part of the transaction system). Furthermore, at page 9, lines 4-5, the specification discloses that stationary parts 23A and 23B (part of the transaction system) apply (or transact) a reaction force. For at least these reasons, the specification discloses a transaction system that transacts a reaction force. Thus, withdrawal of this rejection is respectfully requested.

III. THE CLAIMS DEFINE PATENTABLE SUBJECT MATTER

The Office Action rejects claims 1-8, 9-12 and 18-41 under 35 U.S.C. §103(a) over U.S. Patent 6,359,688 to Akimoto et al. in view of U.S. Patent 6,036,162 to Hayashi; and rejects claims 13-17 under 35 U.S.C. §103(a) over Akimoto et al. in view of Hayashi and further in view of U.S. Patent 5,959,427 to Watson. These rejections are respectfully traversed.

None of the applied references teach, suggest, or render obvious, all of the subject matter recited in independent claims 1, 18, 30 and 45. In particular, the Office Action states

that Hayashi discloses (see Hayashi at Fig. 7 and col. 19, lines 25-37) an actuator 231A anchored to the top plate of the first column 224, which is the holder connected to the projection system. See the Office Action at, e.g., page 4, second paragraph. However, Hayashi fails to teach or suggest suppressing a strain (or influence) of the holder that results from a resonance of the projection system, as recited in claim 1 and similarly recited in claims 18, 30 and 45.

To the contrary, Hayashi discloses that actuators 231 apply a force to movable element 235 in the extra action. See Hayashi at, e.g., col. 19, lines 35-37 and lines 48-50. However, Hayashi fails to disclose a driver connected to the actuator 231A to suppress a strain of the holder which results from a resonance of the projection system.

Neither Akimoto nor Watson cure the deficiencies of Hayashi disclosed above with respect to independent claims 1, 18, 30 and 45.

For at least the reasons discussed above, Applicant respectfully submits that the applied references fail to anticipate, or render obvious, the subject matter of independent claims 1, 18, 30 and 45. Accordingly, the applied references also fail to anticipate subject matter of claims 2-17, 19-29, 31-40 and 46-51, which depend from claims 1, 18, 30 and 45 respectively. Withdrawal of the rejections under 35 U.S.C. §103(a) is therefore respectfully solicited.

IV. NEW CLAIMS

Claims 45-51 have been added and also are patentable. As mentioned above, Hayashi fails to teach or suggest suppressing an influence of a resonance of the projection system.

V. CONCLUSION

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Appendix
Petition for Extension of Time
Amendment Transmittal
Request for Continued Examination

Date: April 21, 2003

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<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>



APPENDIX

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Changes to Claims:

Claims 45-51 are added.

The following is a marked-up version of the amended claims 1, 18 and 30:

1. (Twice Amended) An exposure apparatus that exposes a pattern onto a substrate, the exposure apparatus comprising:
 - a projection system to project the pattern onto the substrate;
 - a holder connected to the projection system to hold the projection system;
 - a main frame that mounts the projection system by means of the holder;
 - a detector to detect information concerning displacement of the projection system;
 - an actuator arranged on the holder; and
 - a driver connected to the actuator to drive the actuator in response to detection results of the detector to suppress a strain of the holder resulting from a resonance of the projection system.
18. (Twice Amended) A method of making an exposure apparatus that exposes a pattern onto a substrate, the method comprising:
 - providing a projection system to project the pattern onto the substrate;
 - providing a holder connected to the projection system to hold the projection system;
 - providing a main frame that mounts the projection system by means of the holder;
 - providing a detector to detect information concerning displacement of the projection system;
 - providing an actuator on the holder; and

providing a driver connected to the actuator to drive the actuator in response to detection results of the detector to suppress a strain of the holder resulting from a resonance of the projection system.

30. (Amended) A method of exposing a pattern onto a substrate through a projection system, the method comprising:

holding the projection system with a holder;

mounting the projection system to a main frame by means of the holder;

detecting information concerning displacement of the projection system; and

driving an actuator mounted on the holder in response to the detected information to suppress a strain of the holder resulting from a resonance of the projection system.